

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In Re Application of:

Bacon, et al.

Serial No.: 09/729,523

Filed: December 4, 2000

Confirmation No.: 4555

Group Art Unit: 2131

Examiner: Sherkat, Arezoo

Docket No.: A-6237 (191930-1170)

For: **Method of Identifying Multiple Digital Streams within a Multiplexed Signal**

APPEAL BRIEF UNDER 37 C.F.R. §1.192

Mail Stop Appeal Brief - Patents
Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This is an appeal from the decision of Examiner Arezoo Sherkat, Group Art Unit 2131, mailed September 14, 2006, rejecting all claims 1-4, 9-20, 22, 23, and 28-30 in the present application and making the rejection FINAL.

I. REAL PARTY IN INTEREST

The real party in interest of the instant application is Scientific-Atlanta, Inc., having its principal place of business at 5030 Sugarloaf Parkway, Lawrenceville, GA 30044. Scientific-Atlanta, Inc., the assignee of record, is wholly owned by Cisco Systems, Inc.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF THE CLAIMS

The Office Action has rejected all presently pending claims 1-4, 9-20, 22, 23, and 28-30 and Applicant hereby appeals the rejection to all claims (1-4, 9-20, 22, 23, and 28-30). Claims 5-8, 21, and 24-27 were canceled during prosecution. Claims 1-4, 9-20, 22, 23, and 28-30 remain pending. Applicant traverses these rejections and respectfully submits that the rejections of record are clearly not proper.

IV. STATUS OF AMENDMENTS

No amendments have been made or requested since the mailing of the FINAL Office Action and all amendments submitted prior to the FINAL action have been entered. A copy of the current claims is attached hereto in the Claims-Appendix in §VIII.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 recites in a system with a plurality of packetized data streams, a method of designating a source of at least one packetized data stream within a multiplexed signal including at least a portion of the at least one packetized data stream, the method comprising the steps of: assigning to the source device (210, 211, e.g.) of the at least one packetized data stream (410, e.g.), a first unique designator (431, 432, e.g.); assigning to the source program of the at least one packetized data stream, a program identification number (see pg 11, lines 5-14); multiplexing at least the portion of the at least one packetized data stream with at least a portion of a second packetized data stream to create the multiplexed signal (410, e.g.); and transmitting the first unique designator (431, 432, e.g.) in conjunction with the multiplexed signal (410, e.g.).

wherein the first unique designator (431, 432, e.g.) indicates the source device (210, 211, e.g.) of the at least one packetized data stream(410, e.g.). This claim terminology may be understood with reference for example, to the inserted element indicator numerals of FIG. 2 and pg 5, lines 9-32, and of FIG. 4 and pg 6, lines 26-37.

Independent claim 9 recites in a host terminal, a method of multiplexing together packets from at least two packetized data streams to enable decryption of the packets by an external conditional access module, the method comprising the steps of: assigning to each of the source devices (210, 211, e.g.) originating the at least two packetized data streams (410, e.g.), associated unique designators (431, 432, e.g.); assigning to each source program originating the at least two packetized data streams (410, e.g.), associated program identification numbers (see pg 11, lines 5-14); multiplexing the packets forming portions of the at least two packetized data streams (410, e.g.) into a signal; creating an association for each packet in the signal with the unique designator of the originating packetized data stream (410, e.g.) from which each packet originated; transmitting the signal and the associations of the packets to the external conditional access module (360, e.g.); and decrypting, in the external conditional access module (360, e.g.), the packets in the signal based on the associated unique designators. This claim terminology may be understood with reference for example, to the inserted element indicator numerals of FIG. 2 and pg 5, lines 9-32, and of FIG. 4 and pg 6, lines 26-37.

Independent claim 11 recites in a system with a plurality of Moving Picture Experts Group type 2 (MPEG-2) standard transport streams and a host terminal, a method of designating to an external conditional access module a source of at least one packet of a first MPEG-2 transport stream with a multiplexed signal including the at least one packet of the first MPEG-2 transport

stream, the method comprising the steps of: assigning to the source device (210, 211, e.g.) of the first MPEG-2 transport stream (410, e.g.), a unique designator (431, 432, e.g.); assigning to the source program of the first MPEG-2 transport stream (410, e.g.), a program identification number; creating a transport stream source indicator signal that includes the unique designator (431, 432, e.g.) associated with the at least one packet of the first MPEG-2 transport stream (410, e.g.); multiplexing the at least one packet of the first MPEG-2 transport stream (410, e.g.) with packets from at least a portion of a second MPEG-2 transport stream (410, e.g.) to create the multiplexed signal; and transmitting to the external conditional access module the transport stream source indicator signal in conjunction with the multiplexed signal, wherein transmission of the transport stream source indicator signal, by the unique designator (431, 432, e.g.), indicates the source device (210, 211, e.g.) of the at least one packet as the source device (210, 211, e.g.) of the first MPEG-2 transport stream (410, e.g.). This claim terminology may be understood with reference for example, to the inserted element indicator numerals of FIG. 2 and pg 5, lines 9-32, and of FIG. 4 and pg 6, lines 26-37.

Independent claim 14 recites an external conditional access module comprising: a host terminal interface (510, e.g.) configured to receive from a host terminal (14, e.g.), an incoming multiplexed signal (410, e.g.) comprising at least one packetized data stream that includes a unique source address (431, 432, e.g.) that indicates a source device (210, 211, e.g.) of a data packet inside the at least one packetized data stream; and a program identification number (see pg 11, lines 5-14); that indicates a source program of a data packet inside the at least one packetized data stream; a de-multiplexer (227, e.g.) configured for de-multiplexing the incoming multiplexed signal (410, e.g.) into data packets associated with the at least one packetized data

stream based on the unique source address (431, 432, e.g.) associated with each data packet; a controller (230, e.g.) configured for determining if decryption is allowed for the data packets associated with the least one packetized data stream and for controlling decryption parameters; and a decryptor (340, 345, e.g.) configured for decrypting, if decryption is allowed, the data packets associated with the at least one packetized data stream using decryption parameters for the at least one packetized data stream. This claim terminology may be understood with reference for example, to the inserted element indicator numerals of FIG. 2 and pg 5, lines 9-32, and of FIG. 4 and pg 6, lines 26-37.

Independent claim 18 recites a host terminal that provides a multiplexed signal to an external conditional access module, wherein the multiplexed signal includes data packets from at least two packetized data streams, the host terminal comprising: at least two tuners (210, 211, e.g.), each tuner for receiving one of the at least two packetized data streams (410, e.g.); and a multiplexer (350, e.g.) for combining data packets from the at least two packetized data streams (410, e.g.) into the multiplexed signal, for assigning a unique source device address (431, 432, e.g.) that indicates which tuner (210, 211, e.g.), received the packetized data stream associated with the data packets, for assigning to the source program of at least one packetized data stream, a program identification number (see pg 11, lines 5-14) for transmitting the multiplexed signal to the external conditional access module (360, e.g.), and for communicating the unique source address (431, 432, e.g.) associated with each data packet to the external conditional access module (360, e.g.). This claim terminology may be understood with reference for example, to the inserted element indicator numerals of FIG. 2 and pg 5, lines 9-32, and of FIG. 4 and pg 6, lines 26-37.

Independent claim 28 recites a point-of-deployment (POD) module comprising: a host terminal interface (510, e.g.) configured to receive from a host terminal (14, e.g.), a multiplexed signal (410, e.g.) comprising a first encrypted signal together with a first transport stream source indicator signal (TSSIS) (431, 432, e.g.) and a program identification number (see pg 11, lines 5-14); a demultiplexer (512, e.g.) configured to use the first TSSIS to identify the first encrypted signal in the multiplexed signal; a controller (230, e.g.) configured to generate a first decryption instruction upon receiving authorization through a first authorization grant signal; and a first decryptor (340, 345, e.g.) configured to receive from the demultiplexer (512, e.g.), the first encrypted signal, and decrypt the first encrypted signal conditional to receiving the first decryption instruction; wherein the first TSSIS indicates the source device (210, 211, e.g.), for the first transport stream. This claim terminology may be understood with reference for example, to the inserted element indicator numerals of FIG. 2 and pg 5, lines 9-32, and of FIG. 4 and pg 6, lines 26-37.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The Final Office Action rejected claims 1-4, 9-20, 22, 23 and 28-30 under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement.

The Final Office Action rejected claims 1-4, 9-20, 22, 23 and 28-30 under 35 U.S.C. 102 (b) as allegedly being anticipated by *Chaney* (U.S. Patent No. 6,035,037).

The Final Office Action rejected claims 2, 10, 12, 15, and 19 under 35 U.S.C. 103(a) as allegedly being unpatentable over *Chaney* (U.S. Patent No. 6,035,037) in view of *Hurst, Jr.* (U.S. Patent No. 6,985,188).

VII. **ARGUMENT**

A. **Discussion of Rejection of Claims 1-4, 9-20, 22, 23, and 28-30 under 35 U.S.C.**

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The Final Office Action rejected claims 1-4, 9-20, 22, 23 and 28-30 under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the written description requirement. For at least the reasons set forth herein, Applicant respectfully disagrees with the rejection and requests that the rejection be overturned. Applicant respectfully reasserts that “assigning to the source device of the at least one packetized data stream, a first unique designator” is supported by a non-limiting embodiment of the specification on page 5, lines 20-22, which recites: “The present invention assigns a unique designator or address to each tuner to be used in identifying the source of the packetized data.” As additional support for the above-mentioned claim feature, Applicant’s specification recites the following: “The multiplexer 226 multiplexes together select portions of the separate signals it receives from each tuner and generates a unique designator signal indicating the originating tuner for each portion of the multiplexed signal.” *See Specification*, page 5, lines 29-31. As the cited claim language is clearly supported in the specification, Applicant respectfully requests that the rejection of claims 1-4, 9-20, 22, 23 and 28-30 under U.S.C. §112 be overturned.

B. **Discussion of Rejection of Claims 2, 10, 12, 15, and 19 under 35 U.S.C. 102**

The Final Office Action rejected claims 2, 10, 12, 15, and 19 under 35 U.S.C. 102 in view of *Chaney*. Applicant respectfully submits that the rejections of these claims under sections 102 and 103 include some inconsistencies. For instance, claims 2, 10, 12, 15, and 19 are included in the rejection under 35 U.S.C. 102 as anticipated by *Chaney*. *See Final Office Action*,

pg. 4. However, in the rejection of those same claims under 35 U.S.C. 103 as unpatentable over *Chaney* in view of *Hurst*, the Office Action expressly states that an element recited in claims 2, 10, 12, 15, and 19, namely, the format of the packetized data stream, is not expressly disclosed in *Chaney*. See *Final Office Action*, pg. 7. For at least this reason, in order for Applicant to properly understand the basis of the rejection, a new corrected Office Action should be entered if one is deemed necessary or the rejection be withdrawn.

C. Discussion of Rejection of Claims 1-4, 22-23, and 30 under 35 U.S.C. 102

The Final Office Action rejected claims 1-4, 22-23 and 30 under 35 U.S.C. §102(b) as allegedly being anticipated by *Chaney* (U.S. Patent No. 6,035,037). For at least the reasons set forth herein, Applicant respectfully disagrees with the rejection and requests that the rejection be overturned.

Independent claim 1 recites:

1. In a system with a plurality of packetized data streams, a method of designating a source of at least one packetized data stream within a multiplexed signal including at least a portion of the at least one packetized data stream, the method comprising the steps of:

assigning to the source device of the at least one packetized data stream, a first unique designator;

assigning to the source program of the at least one packetized data stream, a program identification number;

multiplexing at least the portion of the at least one packetized data stream with at least a portion of a second packetized data stream to create the multiplexed signal; and

transmitting the first unique designator in conjunction with the multiplexed signal, wherein the first unique designator indicates the source device of the at least one packetized data stream.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue. See, e.g., *E.I. du Pont de Nemours*

& *Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 U.S.P.Q.2d 1129 (Fed. Cir. 1988). Applicant respectfully submits that independent claim 1 is allowable for at least the reason that *Chaney* does not disclose, teach, or suggest at least **assigning to the source device of the at least one packetized data stream, a first unique designator**. Support for this claim language can be found in a non-limiting embodiment of the specification on page 5, lines 20-22. Even if, *arguendo*, *Chaney* discloses tuning a tuner between multiple transponders, *Chaney* does not disclose assigning a unique designator to a source device since multiple transponders transmitting at the same frequency would not be separately identifiable based on frequency. Additionally, the delineation of which key to use for descrambling, as allegedly disclosed in *Chaney*, may, *arguendo*, determine the encryption method used, but it does not disclose the assignment of a unique designator to a source device of the packetized data stream. Therefore, for at least these reasons, *Chaney* does not anticipate independent claim 1, and, hence, Applicant respectfully requests that the rejection be overturned.

Because independent claim 1 is allowable over the cited art of record, dependent claims 2-4, 22-23, and 30 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that dependent claims 2-4, 22-23, and 30 contain all the steps/features of independent claim 1. See *Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002) *Jeneric/Pentron, Inc. v. Dillon Co.*, 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); *Wahpeton Canvas Co. v. Frontier Inc.*, 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, since dependent claims 2-4, 22-23, and 30 are patentable over *Chaney*, Applicant respectfully requests that the rejection to claims 2-4, 22-23, and 30 be overturned and the claims be allowed.

D. Discussion of Rejection of Claims 9 and 10 under 35 U.S.C. 102

The Final Office Action rejected claims 9 and 10 under 35 U.S.C. § 102(b) as allegedly being anticipated by *Chaney* (U.S. Patent No. 6,035,037). For at least the reasons set forth herein, Applicant respectfully disagrees with the rejection and requests that the rejection be overturned.

Independent claim 9 recites:

9. In a host terminal, a method of multiplexing together packets from at least two packetized data streams to enable decryption of the packets by an external conditional access module, the method comprising the steps of:

assigning to each of the source devices originating the at least two packetized data streams, associated unique designators;

assigning to each source program originating the at least two packetized data streams, associated program identification numbers;

multiplexing the packets forming portions of the at least two packetized data streams into a signal;

creating an association for each packet in the signal with the unique designator of the originating packetized data stream from which each packet originated;

transmitting the signal and the associations of the packets to the external conditional access module; and

decrypting, in the external conditional access module, the packets in the signal based on the associated unique designators.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. § 102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant respectfully submits that independent claim 9 is allowable for at least the reason that *Chaney* does not disclose, teach, or suggest at least **assigning to each of the source devices originating the at least two packetized data streams, associated unique designators**. Support for this claim language can be found in a non-limiting embodiment of the specification on page 5, lines 20-22. Even if, *arguendo*, *Chaney* discloses tuning a tuner between multiple transponders, *Chaney* does not disclose assigning a unique designator to a source device since multiple transponders transmitting at the same frequency would

not be separately identifiable based on frequency. Additionally, the delineation of which key to use for descrambling, as allegedly disclosed in *Chaney*, may, *arguendo*, determine the encryption method used, but it does not disclose the assignment of a unique designator to a source device of the packetized data stream. Therefore, for at least these reasons, *Chaney* does not anticipate independent claim 9, and, hence, Applicant respectfully requests that the rejection be overturned.

Because independent claim 9 is allowable over the cited art of record, dependent claim 10 (which depends from independent claim 9) is allowable as a matter of law for at least the reason that dependent claim 10 contains all the steps/features of independent claim 9. Therefore, since dependent claim 10 is patentable over *Chaney*, Applicant respectfully requests that the rejection to claim 10 be overturned and the claims be allowed.

E. Discussion of Rejection of Claims 11-13 under 35 U.S.C. 102

The Final Office Action rejected claims 11-13 under 35 U.S.C. §102(b) as allegedly being anticipated by *Chaney* (U.S. Patent No. 6,035,037). For at least the reasons set forth herein, Applicant respectfully disagrees with the rejection and requests that the rejection be overturned.

Independent claim 11 recites:

11. In a system with a plurality of Moving Picture Experts Group type 2 (MPEG-2) standard transport streams and a host terminal, a method of designating to an external conditional access module a source of at least one packet of a first MPEG-2 transport stream with a multiplexed signal including the at least one packet of the first MPEG-2 transport stream, the method comprising the steps of:

- assigning to the source device of the first MPEG-2 transport stream, a unique designator;*
- assigning to the source program of the first MPEG-2 transport stream, a program identification number;
- creating a transport stream source indicator signal that includes the unique designator associated with the at least one packet of the first MPEG-2 transport stream;
- multiplexing the at least one packet of the first MPEG-2 transport stream with

packets from at least a portion of a second MPEG-2 transport stream to create the multiplexed signal; and
transmitting to the external conditional access module the transport stream source indicator signal in conjunction with the multiplexed signal, wherein transmission of the transport stream source indicator signal, by the unique designator, indicates the source device of the at least one packet as the source device of the first MPEG-2 transport stream.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant respectfully submits that independent claim 11 is allowable for at least the reason that *Chaney* does not disclose, teach, or suggest at least **assigning to the source device of the first MPEG-2 transport stream, a unique designator**. Support for this claim language can be found in a non-limiting embodiment of the specification on page 5, lines 20-22. Even if, *arguendo*, *Chaney* discloses tuning a tuner between multiple transponders, *Chaney* does not disclose assigning a unique designator to a source device since multiple transponders transmitting at the same frequency would not be separately identifiable based on frequency. Additionally, the delineation of which key to use for descrambling, as allegedly disclosed in *Chaney*, may, *arguendo*, determine the encryption method used, but it does not disclose the assignment of a unique designator to a source device of the packetized data stream. Therefore, for at least these reasons, *Chaney* does not anticipate independent claim 11, and, hence, Applicant respectfully requests that the rejection be overturned.

Because independent claim 11 is allowable over the cited art of record, dependent claims 12 and 13 (which depend from independent claim 11) are allowable as a matter of law for at least the reason that dependent claims 12 and 13 contain all the steps/features of independent claim 11. Therefore, since dependent claims 12 and 13 are patentable over *Chaney*, Applicant respectfully requests that the rejection to claims 12 and 13 be overturned and the claims be allowed.

F. Discussion of Rejection of Claims 14-17 under 35 U.S.C. 102

The Final Office Action rejected claims 14-17 under 35 U.S.C. §102(b) as allegedly being anticipated by *Chaney* (U.S. Patent No. 6,035,037). For at least the reasons set forth herein, Applicant respectfully disagrees with the rejection and requests that the rejection be overturned.

Independent claim 14 recites:

14. An external conditional access module comprising:
a host terminal interface configured to receive from a host terminal, an incoming multiplexed signal comprising at least one packetized data stream that includes
a unique source address that indicates a source device of a data packet inside the at least one packetized data stream; and
a program identification number that indicates a source program of
a data packet inside the at least one packetized data stream;
a de-multiplexer configured for de-multiplexing the incoming multiplexed signal into data packets associated with the at least one packetized data stream based on the unique source address associated with each data packet;
a controller configured for determining if decryption is allowed for the data packets associated with the least one packetized data stream and for controlling decryption parameters; and
a decryptor configured for decrypting, if decryption is allowed, the data packets associated with the at least one packetized data stream using decryption parameters for the at least one packetized data stream.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant respectfully submits that independent claim 14 is allowable for at least the reason that *Chaney* does not disclose, teach, or suggest at least **a unique source address that indicates a source device of a data packet inside the at least one packetized data stream**. Support for this claim language can be found in a non-limiting embodiment of the specification on page 5, lines 20-22. Even if, arguendo, *Chaney* discloses tuning a tuner between multiple transponders, *Chaney* does not disclose assigning a unique

designator to a source device since multiple transponders transmitting at the same frequency would not be separately identifiable based on frequency. Additionally, the delineation of which key to use for descrambling, as allegedly disclosed in *Chaney*, may, *arguendo*, determine the encryption method used, but it does not disclose the assignment of a unique designator to a source device of the packetized data stream. Therefore, for at least these reasons, *Chaney* does not anticipate independent claim 14, and, hence, Applicant respectfully requests that the rejection be overturned.

Because independent claim 14 is allowable over the cited art of record, dependent claims 15-17 (which depend from independent claim 14) are allowable as a matter of law for at least the reason that dependent claims 15-17 contain all the steps/features of independent claim 14. Therefore, since dependent claims 15-17 are patentable over *Chaney*, Applicant respectfully requests that the rejection to claims 15-17 be overturned and the claims be allowed.

G. Discussion of Rejection of Claims 18-20 under 35 U.S.C. 102

The Final Office Action rejected claims 18-20 under 35 U.S.C. §102(b) as allegedly being anticipated by *Chaney* (U.S. Patent No. 6,035,037). For at least the reasons set forth herein, Applicant respectfully disagrees with the rejection and requests that the rejection be overturned.

Independent claim 18 recites:

18. A host terminal that provides a multiplexed signal to an external conditional access module, wherein the multiplexed signal includes data packets from at least two packetized data streams, the host terminal comprising:

- at least two tuners, each tuner for receiving one of the at least two packetized data streams; and

- a multiplexer for combining data packets from the at least two packetized data streams into the multiplexed signal, for assigning *a unique source device address that indicates which tuner received the packetized data stream associated with the data packets*, for assigning to the source program of at least one packetized data stream, a program identification number; for transmitting the multiplexed signal to the external conditional access

module, and for communicating the unique source address associated with each data packet to the external conditional access module.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant respectfully submits that independent claim 18 is allowable for at least the reason that *Chaney* does not disclose, teach, or suggest at least **a unique source device address that indicates which tuner received the packetized data stream associated with the data packets**. Support for this claim language can be found in a non-limiting embodiment of the specification on page 5, lines 20-22. Even if, *arguendo*, *Chaney* discloses tuning a tuner between multiple transponders, *Chaney* does not disclose assigning a unique designator to a source device since multiple transponders transmitting at the same frequency would not be separately identifiable based on frequency. Additionally, the delineation of which key to use for descrambling, as allegedly disclosed in *Chaney*, may, *arguendo*, determine the encryption method used, but it does not disclose the assignment of a unique designator to a source device of the packetized data stream. Therefore, for at least these reasons, *Chaney* does not anticipate independent claim 18, and, hence, Applicant respectfully requests that the rejection be overturned.

Because independent claim 18 is allowable over the cited art of record, dependent claims 19 and 20 (which depend from independent claim 18) are allowable as a matter of law for at least the reason that dependent claims 19 and 20 contain all the steps/features of independent claim 18. Therefore, since dependent claims 19 and 20 are patentable over *Chaney*, Applicant respectfully requests that the rejection to claims 19 and 20 be overturned and the claims be allowed.

H. Discussion of Rejection of Claims 28 and 29 under 35 U.S.C. 102

The Final Office Action rejected claims 28 and 29 under 35 U.S.C. §102(b) as allegedly being anticipated by *Chaney* (U.S. Patent No. 6,035,037). For at least the reasons set forth herein, Applicant respectfully disagrees with the rejection and requests that the rejection be overturned.

Independent claim 28 recites:

28. A point-of-deployment (POD) module comprising:
a host terminal interface configured to receive from a host terminal, a multiplexed signal comprising a first encrypted signal together with a first transport stream source indicator signal (TSSIS) and a program identification number;
a demultiplexer configured to use the first TSSIS to identify the first encrypted signal in the multiplexed signal;
a controller configured to generate a first decryption instruction upon receiving authorization through a first authorization grant signal; and
a first decryptor configured to receive from the demultiplexer, the first encrypted signal, and decrypt the first encrypted signal conditional to receiving the first decryption instruction;
wherein the first TSSIS indicates the source device for the first transport stream.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant respectfully submits that independent claim 28 is allowable for at least the reason that *Chaney* does not disclose, teach, or suggest at least **wherein the first TSSIS indicates the source device for the first transport stream**. Support for this claim language can be found in a non-limiting embodiment of the specification on page 5, lines 20-22. Even if, arguendo, *Chaney* discloses tuning a tuner between multiple transponders, *Chaney* does not disclose assigning a unique designator to a source device

since multiple transponders transmitting at the same frequency would not be separately identifiable based on frequency. Additionally, the delineation of which key to use for descrambling, as allegedly disclosed in *Chaney*, may, *arguendo*, determine the encryption method used, but it does not disclose the assignment of a unique designator to a source device of the packetized data stream. Therefore, for at least these reasons, *Chaney* does not anticipate independent claim 28, and, hence, Applicant respectfully requests that the rejection be overturned.

Because independent claim 28 is allowable over the cited art of record, dependent claim 29 (which depends from independent claim 28) is allowable as a matter of law for at least the reason that dependent claim 29 contains all the steps/features of independent claim 28. Therefore, since dependent claim 29 is patentable over *Chaney*, Applicant respectfully requests that the rejection to claim 29 be overturned and the claims be allowed.

I. Discussion of Rejection of Claims 2, 10, 12 15, and 19 under U.S.C. 103

The Final Office Action rejected claims 2, 10, 12 15, and 19 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Chaney* (U.S. Patent No. 6,035,037) in view of *Hurst, Jr.* (U.S. Patent No. 6,985,188). For at least the reasons set forth herein, Applicant respectfully disagrees with the rejection and requests that the rejection be overturned. Because their respective, independent claims are allowable over the cited references of record, dependent claims 2, 10, 12 15, and 19 (which depend from their respective, independent claims) are allowable as a matter of law for at least the reason that dependent claims 2, 10, 12 15, and 19 contain all the steps/features of their respective, independent claims. Therefore, Applicant respectfully requests that the rejection to claims 2, 10, 12 15, and 19 be overturned and the claims be allowed.

CONCLUSION

Based upon the foregoing discussion, Applicants respectfully requests that the Examiner's final rejection of claims 1-4, 9-20, 22, 23, and 28-30 be overturned by the Board, and that the application be allowed to issue as a patent with all pending claims.

In addition to the claims shown in the claims Appendix VIII, Appendix IX attached hereto indicates that there is no evidence being attached and relied upon by this brief. Appendix X attached hereto indicates that there are no related proceedings.

The PTO is authorized to charge the \$500 fee for this Appeal Brief to the credit account identified in the accompanying credit card authorization form. No additional fee is believed to be due in connection with this appeal. If, however, any additional fee is deemed to be payable, you are hereby authorized to charge any such fee to deposit account 20-0778.

Respectfully submitted,

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VIII. CLAIMS - APPENDIX

1. In a system with a plurality of packetized data streams, a method of designating a source of at least one packetized data stream within a multiplexed signal including at least a portion of the at least one packetized data stream, the method comprising the steps of:

assigning to the source device of the at least one packetized data stream, a first

unique designator;

assigning to the source program of the at least one packetized data stream, a

program identification number;

multiplexing at least the portion of the at least one packetized data stream with at

least a portion of a second packetized data stream to create the

multiplexed signal; and

transmitting the first unique designator in conjunction with the multiplexed

signal, wherein the first unique designator indicates the source device of

the at least one packetized data stream.

2. The method of claim 1, wherein the packetized data stream is in a format compliant with at least one of Moving Picture Experts Group type 2 (MPEG-2) standard, Moving Picture Experts Group type 4 (MPEG-4) standard, Asynchronous Transfer Modulation (ATM) standard, and Internet Protocol (IP) standard.

3. The method of claim 1, wherein the step of transmitting the first unique

designator comprises the steps of:

creating a first unique designator signal that includes the first unique designator;
and
transmitting the first unique designator signal in conjunction with the multiplexed
signal, wherein the first unique designator signal provides the first unique
designator at the start of the at least one packet of the at least one
packetized data stream.

4. The method of claim 1, wherein the step of transmitting the first unique
designator comprises the steps of:

creating a first unique designator signal that includes the first unique designator;
and
transmitting the first unique designator signal in conjunction with the multiplexed
signal, wherein the first unique designator signal provides the first unique
designator at the start of the at least one byte of the at least one packetized
data stream.

5. - 8. (Canceled).

9. In a host terminal, a method of multiplexing together packets from at least two packetized data streams to enable decryption of the packets by an external conditional access module, the method comprising the steps of:

assigning to each of the source devices originating the at least two packetized data streams, associated unique designators;

assigning to each source program originating the at least two packetized data streams, associated program identification numbers;

multiplexing the packets forming portions of the at least two packetized data streams into a signal;

creating an association for each packet in the signal with the unique designator of the originating packetized data stream from which each packet originated;

transmitting the signal and the associations of the packets to the external conditional access module; and

decrypting, in the external conditional access module, the packets in the signal based on the associated unique designators.

10. The method of claim 9, wherein the at least two packetized data streams are in a format compliant with at least one of Moving Picture Experts Group type 2 (MPEG-2) standard, Moving Picture Experts Group type 4 (MPEG-4) standard, Asynchronous Transfer Modulation (ATM) standard, and Internet Protocol (IP) standard.

11. In a system with a plurality of Moving Picture Experts Group type 2 (MPEG-2) standard transport streams and a host terminal, a method of designating to an external conditional access module a source of at least one packet of a first MPEG-2 transport stream with a multiplexed signal including the at least one packet of the first MPEG-2 transport stream, the method comprising the steps of:

assigning to the source device of the first MPEG-2 transport stream, a unique designator;

assigning to the source program of the first MPEG-2 transport stream, a program identification number;

creating a transport stream source indicator signal that includes the unique designator associated with the at least one packet of the first MPEG-2 transport stream;

multiplexing the at least one packet of the first MPEG-2 transport stream with packets from at least a portion of a second MPEG-2 transport stream to create the multiplexed signal; and

transmitting to the external conditional access module the transport stream source indicator signal in conjunction with the multiplexed signal, wherein transmission of the transport stream source indicator signal, by the unique designator, indicates the source device of the at least one packet as the source device of the first MPEG-2 transport stream.

12. The method of claim 11, further including the step of decrypting, in the external conditional access module, the at least one packet based on the source of the first MPEG-2 transport stream.

13. The method of claim 12, further including the step of transmitting the decrypted at least one packet from the external conditional access module to the host terminal.

14. An external conditional access module comprising:
 - a host terminal interface configured to receive from a host terminal, an incoming multiplexed signal comprising at least one packetized data stream that includes
 - a unique source address that indicates a source device of a data packet inside the at least one packetized data stream; and
 - a program identification number that indicates a source program of a data packet inside the at least one packetized data stream;
 - a de-multiplexer configured for de-multiplexing the incoming multiplexed signal into data packets associated with the at least one packetized data stream based on the unique source address associated with each data packet;
 - a controller configured for determining if decryption is allowed for the data packets associated with the least one packetized data stream and for controlling decryption parameters; and
 - a decryptor configured for decrypting, if decryption is allowed, the data packets associated with the at least one packetized data stream using decryption parameters for the at least one packetized data stream.
15. The method of claim 14, wherein the data packets and the packetized data stream are in a format compliant with at least one of Moving Picture Experts type 2 (MPEG-2) standard, Moving Picture Experts Group type 4 (MPEG-4) standard, Asynchronous Transfer Modulation (ATM) standard, and Internet Protocol (IP) standard.

16. The method of claim 14, further comprising an encryptor for encrypting the data packets associated with the at least one packetized data stream.
17. The method of claim 16, wherein the encryption provides copy protection for the data packets associated with the at least one packetized data stream.
18. A host terminal that provides a multiplexed signal to an external conditional access module, wherein the multiplexed signal includes data packets from at least two packetized data streams, the host terminal comprising:
- at least two tuners, each tuner for receiving one of the at least two packetized data streams; and
 - a multiplexer for combining data packets from the at least two packetized data streams into the multiplexed signal, for assigning a unique source device address that indicates which tuner received the packetized data stream associated with the data packets, for assigning to the source program of at least one packetized data stream, a program identification number; for transmitting the multiplexed signal to the external conditional access module, and for communicating the unique source address associated with each data packet to the external conditional access module.

19. The host terminal of claim 18, wherein the data packets and the packetized data stream are in a format compliant with at least one of Moving Picture Experts Group type 2 (MPEG-2) standard, Moving Picture Experts Group type 4 (MPEG-4) standard, Asynchronous Transfer Modulation (ATM) standard, and Internet Protocol (IP) standard.

20. The host terminal of claim 18, further comprising a demultiplexer for receiving an output signal from the external conditional access module, for de-multiplexing the output signal, and for providing the at least two packetized data streams as separate packetized data streams.

21. (Canceled).

22. The method of claim 3, wherein the at least one packetized data stream comprises a first encrypted signal, and wherein the source device of the at least one packetized data stream comprises a first tuner.

23. The method of claim 3, further comprising decrypting the first encrypted signal subject to a first authorization.

24. – 27. (Canceled).

28. A point-of-deployment (POD) module comprising:
a host terminal interface configured to receive from a host terminal, a multiplexed

signal comprising a first encrypted signal together with a first transport stream source indicator signal (TSSIS) and a program identification number;

a demultiplexer configured to use the first TSSIS to identify the first encrypted signal in the multiplexed signal;

a controller configured to generate a first decryption instruction upon receiving authorization through a first authorization grant signal; and

a first decryptor configured to receive from the demultiplexer, the first encrypted signal, and decrypt the first encrypted signal conditional to receiving the first decryption instruction;

wherein the first TSSIS indicates the source device for the first transport stream.

29. The POD module of claim 28, further comprising:
the host terminal interface configured to receive from the host terminal, the
multiplexed signal comprising a second encrypted signal together with a
second transport stream source indicator signal (TSSIS);
the demultiplexer configured to use the second TSSIS to identify the second
encrypted signal in the multiplexed signal;
the controller configured to generate a second decryption instruction upon
receiving authorization through a second authorization grant signal; and
a second decryptor configured to receive from the demultiplexer, the second
encrypted signal, and decrypt the second encrypted signal conditional to
receiving the second decryption instruction.
30. The method of claim 22, further comprising:
assigning to a second tuner that is a source of the second packetized data stream, a
second unique designator; and
transmitting the second unique designator in conjunction with the multiplexed
signal, whereby the second unique designator provides an identification of
the second tuner as the source of the second packetized data stream.

IX. EVIDENCE - APPENDIX

None.

X. RELATED PROCEEDINGS - APPENDIX

None.